

AMENDMENTS TO THE CLAIMS

1. – 6. (Canceled)

7. (Currently Amended) An isolated nucleic acid encoding an alkaline protease having an amino acid sequence which is at least 90% homologous to an amino acid sequence of SEQ ID NO: 1, wherein said ~~isolated~~ alkaline protease has alkaline protease activity, and said alkaline protease has the following physicochemical properties:

(i) Acting pH range acting over a wide pH range of 4-13 and exhibiting, at a pH of 6-12, 80% or more the activity at the optimum pH;

(ii) Stable pH range being stable over a pH range of 6-11 when treated at 40°C for 30 minutes;

(iii) Isoelectric point of approximately 8.9-9.1; and

(iv) Effect of a fatty acid casein-degrading activity not being inhibited by oleic acid.

8. (Previously Presented) A microorganism which is transformed with the nucleic acid of claim 7 and produces the alkaline protease.

9. (Previously Presented) The microorganism of claim 8, which is a bacteria.

10. - 14. (Canceled)

15. (Previously Presented) The microorganism of claim 8, which belongs to the genus Bacillus.

16. – 18. (Canceled)

19. (Previously Presented) A method of producing the microorganism of claim 8, comprising transforming a microorganism with the nucleic acid.

20. (Previously Presented) A method of producing the alkaline protease of claim 7, comprising culturing a microorganism which produces the alkaline protease in a culture medium and then isolating the alkaline protease from the culture medium.

21. (Currently Amended) An isolated nucleic acid encoding an alkaline protease having an amino acid sequence which is at least 90% homologous to an amino acid sequence of SEQ ID NO: 2, wherein said isolated alkaline protease has alkaline protease activity, and said alkaline protease has the following physicochemical properties:

(i) Acting pH range acting over a wide pH range of 4-13 and exhibiting, at a pH of 6-12, 80% or more the activity at the optimum pH;

(ii) Stable pH range being stable over a pH range of 6-11 when treated at 40°C for 30 minutes;

(iii) Isoelectric point of approximately 8.9-9.1; and

(iv) Effect of a fatty acid casein-degrading activity not being inhibited by oleic acid.

22. (Previously Presented) A microorganism which is transformed with the nucleic acid of claim 21 and produces the alkaline protease.

23. (Previously Presented) The microorganism of claim 22, which is a bacteria.

24. – 28. (Canceled)

29. (Previously Presented) The microorganism of claim 22, which belongs to the genus Bacillus.

30. – 32. (Canceled)

33. (Previously Presented) A method of producing the microorganism of claim 22, comprising transforming a microorganism with the nucleic acid.

34. (Previously Presented) A method of producing the alkaline protease of claim 21, comprising culturing a microorganism which produces the alkaline protease in a culture medium and then isolating the alkaline protease from the culture medium.

SUPPORT FOR THE AMENDMENTS

Claims 1-6, 18, and 32 were previously canceled.

Claims 10-14, 16-17, 24-28, and 30-31 are canceled herein.

Claims 7 and 21 have been amended.

Support for the amendment of Claims 7 and 21 is provided by original Claims 1, 3,
and 4.

No new matter has been added by the present amendment.